

*National Institute of Health Dr. Ricardo Jorge*

*Department of Health Promotion and  
Prevention of  
Non Communicable Diseases*

Helena Alves

Porto, 30-3-2016

UZHELTH visit (Uzbekistan) to INSA

## ***\_health promotion and chronic diseases***

*The Department of Health Promotion and Chronic Diseases develops its activities in the field of health promotion, including health determinants and equity, empowerment and health literacy and chronic diseases, as well as in the field of biopathology.*

# Presentation

*\_The department of Health Promotion and Chronic Diseases (DPSCD) develops activities in the areas of health promotion and prevention of chronic diseases.*

***This department is responsible for:***

*\_Conducting research on the etiology, determinants and pathogenesis of chronic diseases with major impact in the Portuguese population;*

*\_Developing effective methodologies of community intervention and evaluation;*

*\_Establishing standard values for biological parameters nationally;*

*\_Contributing to monitoring of individual and collective health;*

*\_Disseminating scientific knowledge and improving health literacy, namely in health promotion and in prevention strategies for chronic disorders.*

# Organization

*The DPSCDC is organized in four units:  
Health Promotion, Research and Development,  
Reference Laboratory and Integrated Laboratory.*

# Research & Development

*\_The Research and Development Unit (UID) develops research projects integrating biologic, epidemiologic and psycho-social aspects in health and disease.*

*\_The ongoing studies focus on cardiovascular disease, including stroke, sudden death, atherosclerosis and inherited disorders of lipid metabolism, and on neurodevelopmental disorders and related issues, such as autism and baby-mother bonding.*

# Research & Development

*\_These studies aim at the characterization of risk factors and identification of useful biomarkers, with a particular emphasis on genomics and psycho-social approaches.*

*\_For this purpose, biobanks and databases representing large population samples are being established, and include information regarding life style, clinical risk factors and genetic background, among others.*

*\_These are precious resources that will contribute to a better understanding of biological and psycho-social interactions in health and disease.*

# Research & Development

***Multidisciplinary research activities include:***

- \_Estimation of disease prevalence and frequencies of specific biological and psycho-social risk factors;*
- \_Large scale genome-wide screenings, as part of international collaborations, aiming at the identification of susceptibility genes;*
- \_Characterization of cellular and molecular mechanisms disrupted in chronic disease;*
- \_Pharmacogenetics, aiming at uncovering the genetic basis of the variable patient response to specific drugs;*
- \_Translation of acquired knowledge into prevention and intervention strategies, and evidence-based policy guidelines;*
- \_Health impact assessment, including development and validation of questionnaires and risk assessment;*
- \_Research on diagnostic and planning at the community level.*

# Reference Laboratory

*\_The Reference Laboratorial Unit (ULR) basis its output on highly complex methodologies such as liquid and gas chromatography, mass spectrometry, atomic absorption and flow cytometry.*

*\_Its goal is to implement new diagnostic tests based on previously acquired scientific expertise and to offer specific diagnostic panels for diseases that affect a vast number of citizens, for example, cardio-vascular diseases and diabetes; such panels which include different tests, are intended to characterise parameters not usually available in routine laboratories.*



# Reference Laboratory

*\_They also include a report that will enhance the clinician to establish, or rule out, the presumptive diagnosis.*

*\_At the laboratory level this unit hosts the National Plan to Control Hemoglobinopathies, performing screening and confirmatory tests for many primary care units and hospitals in Portugal.*

*\_At the community intervention level, produces validated health diagnosis instruments of population basis, as well as effective intervention methodologies in health promotion and chronic disease prevention.*

*\_In the context of health observation, the department develops projects to:*

*\_Evaluate the health impact of policies and measures of the health sector as well as others sectors;*

*\_Study risk, protection, biological and psycho-social factors of chronic disease, in the context of epidemiologic vigilance.*

# Training

*\_The Department offers training supervision within its research projects, cooperating with various universities in the country for post-graduate degrees (PhD and MSc programs); offers post-doctoral positions; and promotes ongoing professional education opportunities.*

*In the respective areas of specialization, the department organizes advanced professional courses and offers consulting services.*

# Diffusion of Scientific Culture



*\_The Department encourages the dissemination of scientific culture, aiming at promoting citizen literacy for a better management of their resources and their health, as well as to improve the public knowledge on biomedical research.*

- \_Promotes the creation of networks, websites and interactive platforms of knowledge;*
- \_Organizes conferences and workshops;*
- \_Elaborates publications targeting different populations, including associations, institutions and schools;*
- \_Publishes the results of the research projects developed, in specialized journals and in magazines and journals for the general public.*

# Service Provision

*\_The Integrated Laboratorial Unit (ULI) strives to provide the highest quality clinical laboratory testing for the public in general, primary care units and hospitals.*

*\_It has 2 locations, one at the Lisbon headquarters and another in Porto, at Centro de Saúde Pública Dr. Gonçalves Ferreira; the laboratory areas covered are: haematology, clinical chemistry, endocrinology and immunology.*

*\_The tests performed reflect the commitment to continual quality improvement, a fundamental request for a state laboratory.*

*Health Literacy*

*Health Impact Assessment*

*Mental Health and Child Development Disorders*

*Cardio and Cerebral-Vascular Diseases*

*Pathologies of Red Blood Cells*

*Immunologic Determinants in Chronic Diseases*

*Reference Methodologies and Materials*